WORKSHOP: FRONTIERS OF SYNCHROTRON-BASED X-RAY MICRODIFFRACTION

Organized in honor of Jim Patel's 80th Birthday

by: N. Tamura & B.W. Batterman

Saturday, October 22nd, 2005

9:00 AM: Introduction to the workshop by B.W. Batterman

9:15 AM: William D. Nix, Stanford University

X-ray microfocusing optics

9:30 AM: Don H. Bilderback, CHESS
Microbeam applications with one-bounce glass capillaries for diffraction, imaging & spectroscopy at CHESS and Hasylab

10:15 AM: Gene E. Ice, ORNL
Challenges and prospects for x-ray nanodiffraction and nanobeam optics

10: 45 AM: Pause

Applications

11:00 AM: G.S. Cargill III, Lehigh University
Thermal and Electromigration-Induced Strains in Polycrystalline Films and Conductor Lines: X-ray Microbeam Measurements and Analysis

11:30 AM: Bennett C. Larson, ORNL
3D submicron resolution x-ray structural microscopy using polychromatic and monochromatic microbeams

12:00 PM: Lunch

1:30 PM: Nobumichi Tamura. LBNL
The X-ray microdiffraction program at the ALS: past, present and future.

2:00 PM: Apurva Mehta, SLAC

to be announced

2:30 PM: Arief S. Budiman, Stanford University
Crystal plasticity at small scale using submicron x-ray diffraction

3:00 PM: Pause

3:30 PM: Jong-Ook Suh, UCLA
Synchrotron radiation micro x-ray diffraction study of reliability problems in electronic packaging technology

4:00 PM: Workshop conclusion

Dinner in honor of Jim Patel